

FIG - 1

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1	CTG	AGC	TGC	ATC	ATG	GTG	CGG	TCT	GTG	GCC	TGG	GCA	GGT	TTC	ATG	GTC	CTG	CTG	54
1					M	V	R	S	V	A	W	A	G	F	M	V	L	L	14
55	ATG	ATC	CCA	TGG	GGC	TCT	GCT	GCA	AAA	CTG	GTC	TGC	TAC	TTC	ACC	AAC	TGG	GCC	108
15	M	I	P	W	G	S	A	A	K	L	V	C	Y	F	T	N	W	A	32
109	CAG	TAC	AGA	CAG	GGG	GAG	GCT	CGC	TTC	CTG	CCC	AAG	GAC	TTG	GAC	CCC	AGC	CTT	162
33	Q	Y	R	Q	G	E	A	R	F	L	P	K	D	L	D	P	S	L	50
163	TGC	ACC	CAC	CTC	ATC	TAC	GCC	TTC	GCT	GGC	ATG	ACC	AAC	CAC	CAG	CTG	AGC	ACC	216
51	C	T	H	L	I	Y	A	F	A	G	M	T	N	H	Q	L	S	T	68
217	ACT	GAG	TGG	AAT	GAC	GAG	ACT	CTC	TAC	CAG	GAG	TTC	AAT	GGC	CTG	AAG	AAG	ATG	270
69	T	E	W	N	D	E	T	L	Y	Q	E	F	N	G	L	K	K	M	86
271	AAT	CCC	AAG	CTG	AAG	ACC	CTG	TTA	GCC	ATC	GGA	GGC	TGG	AAT	TTC	GGC	ACT	CAG	324
87	N	P	K	L	K	T	L	L	A	I	G	G	W	N	F	G	T	Q	104
325	AAG	TTC	ACA	GAT	ATG	GTA	GCC	ACG	GCC	AAC	AAC	CGT	CAG	ACC	TTT	GTC	AAC	TCG	378
105	K	F	T	D	M	V	A	T	A	N	N	R	Q	T	F	V	N	S	122
379	GCC	ATC	AGG	TTT	CTG	CGC	AAA	TAC	AGC	TTT	GAC	GGC	CTT	GAC	CTT	GAC	TGG	GAG	432
123	A	I	R	F	L	R	K	Y	S	F	D	G	L	D	L	D	W	E	140
433	TAC	CCA	GGA	AGC	CAG	GGG	AGC	CCT	GCC	GTA	GAC	AAG	GAG	CGC	TTC	ACA	ACC	CTG	486
141	Y	P	G	S	Q	G	S	P	A	V	D	K	E	R	F	T	T	L	158
487	GTA	CAG	GAC	TTG	GCC	AAT	GCC	TTC	CAG	CAG	GAA	GCC	CAG	ACC	TCA	GGG	AAC	GAA	540
159	V	Q	D	L	A	N	A	F	Q	Q	E	A	Q	T	S	G	K	E	176
541	CGC	CTT	CTT	CTG	AGT	GCA	CGC	GTT	CCA	GCT	GGG	CAG	ACC	TAT	GTG	GAT	GCT	GGA	594
177	R	L	L	L	S	A	A	V	P	A	G	Q	T	Y	V	D	A	G	194
595	TAC	GAG	GTG	GAC	AAA	ATC	GCC	CAG	AAC	CTG	GAT	TTT	GTC	AAC	CTT	ATG	GCC	TAC	648
195	Y	E	V	D	K	I	A	Q	N	L	D	F	V	N	L	M	A	Y	212
649	GAC	TTC	CAT	GGC	TCT	TGG	GAG	AAG	GTC	ACG	GGA	CAT	AAC	AGC	CCC	CTC	TAC	AAG	702
213	D	F	H	G	S	W	E	K	V	T	G	H	N	S	P	L	Y	K	230
703	AGG	CAA	GAA	GAG	AGT	GGT	GCA	GCA	GCC	AGC	CTC	AAC	GTG	GAT	GCT	GCT	GTG	CAA	756
231	R	Q	E	E	S	G	A	A	A	S	L	N	V	D	A	A	V	Q	248
757	CAG	TGG	CTG	CAG	AAG	GGG	ACC	CCT	GCC	AGC	AAG	CTG	ATC	CTT	GGC	ATG	CCT	ACC	810
249	Q	W	L	Q	K	G	T	P	A	S	K	L	I	L	G	M	P	T	266
811	TAC	GGA	CGC	TCC	TTC	ACA	CTG	GCC	TCC	TCA	TCA	GAC	ACC	AGA	GTG	GGG	GCC	CCA	864
267	Y	G	R	S	F	T	L	A	S	S	S	D	T	R	V	G	A	P	284
865	GCC	ACA	GGG	TCT	GGC	ACT	CCA	GGC	CCC	TTC	ACC	AAG	GAA	GGA	GGG	ATG	CTG	GCC	918
285	A	T	G	S	G	T	P	G	P	F	T	K	E	G	G	M	L	A	302
919	TAC	TAT	GAA	GTC	TGC	TCC	TGG	AAG	GGG	GCC	ACC	AAA	CAG	AGA	ATC	CAG	GAT	CAG	972
303	Y	Y	E	V	C	S	W	K	G	A	T	K	Q	R	I	Q	D	Q	320
973	AAG	GTG	CCC	TAC	ATC	TTC	CGG	GAC	AAC	CAG	TGG	GTG	GGC	TTT	GAT	GAT	GTG	GAG	1026
321	K	V	P	Y	I	F	R	D	N	Q	W	V	G	F	D	D	V	E	338
1027	AGC	TTC	AAA	ACC	AAG	GTG	AGC	TAT	CTG	AAG	CAG	AAG	GGA	CTG	GGC	GGG	GCC	ATG	1080
339	S	F	K	T	K	V	S	Y	L	K	Q	K	G	L	G	G	A	M	356
1081	GTC	TGG	GCA	CTG	GAC	TTA	GAT	GAC	TTT	GCC	GGC	TTC	TCC	TGC	AAC	CAG	GGC	CGA	1134
357	V	W	A	L	D	L	D	D	F	A	G	F	S	C	N	Q	G	R	374
1135	TAC	CCC	CTC	ATC	CAG	ACG	CTA	CGG	CAG	GAA	CTG	AGT	CTT	CCA	TAC	TTG	CCT	TCA	1188
375	Y	P	L	I	Q	T	L	R	Q	E	L	S	L	P	Y	L	P	S	392
1189	GGC	ACC	CCA	GAG	CTT	GAA	GTT	CCA	AAA	CCA	GGT	CAG	CCC	TCT	GAA	CCT	GAG	CAT	1242
393	G	T	P	E	L	E	V	P	K	P	G	Q	P	S	E	P	E	H	410
1243	GGC	CCC	AGC	CCT	GGA	CAA	GAC	ACG	TTC	TGC	CAG	GGC	AAA	GCT	GAT	GGG	CTC	TAT	1296
411	G	P	S	P	G	Q	D	T	F	C	Q	G	K	A	D	G	L	Y	428
1297	CCC	AAT	CCT	CGG	GAA	CGG	TCC	AGC	TTC	TAC	AGC	TGT	GCA	GCG	GGG	CGG	CTG	TTC	1350
429	P	N	P	R	E	R	S	S	F	Y	S	C	A	A	G	R	L	F	446
1351	CAG	CAA	AGC	TGC	CCG	ACA	GGC	CTG	GTG	TTC	AGC	AAC	TCC	TGC	AAA	TGC	TGC	ACC	1404
447	Q	Q	S	C	P	T	G	L	V	F	S	N	S	C	K	C	C	T	464
1405	TGG	AAT	TGA	GTC	GTA	AAG	CCC	CTC	CAG	TCC	AGC	TTT	GAG	GCT	GGG	CCC	AGG	ATC	1458
465	W	N	***																466
1459	ACT	CTA	CAG	CCT	GCC	TCC	TGG	GTT	TTC	CTG	GGG	GCC	GCA	ATC	TGG	CTC	CTG	CAG	1512
1513	GCC	TTT	CTG	TGG	TCT	TCC	TTT	ATC	CAG	GCT	TTT	TGC	TCT	CAG	CCT	TGC	CTT	CCT	1566
1567	TTT	TTC	TGG	GTC	TCC	TGG	GCT	GCC	CCT	TTC	ACT	TGC	AAA	ATA	AAT	CTT	TGG	TTT	1620
1621	GTG	CCC	CTC	TTC	AAA	AAA	AAA	AA											

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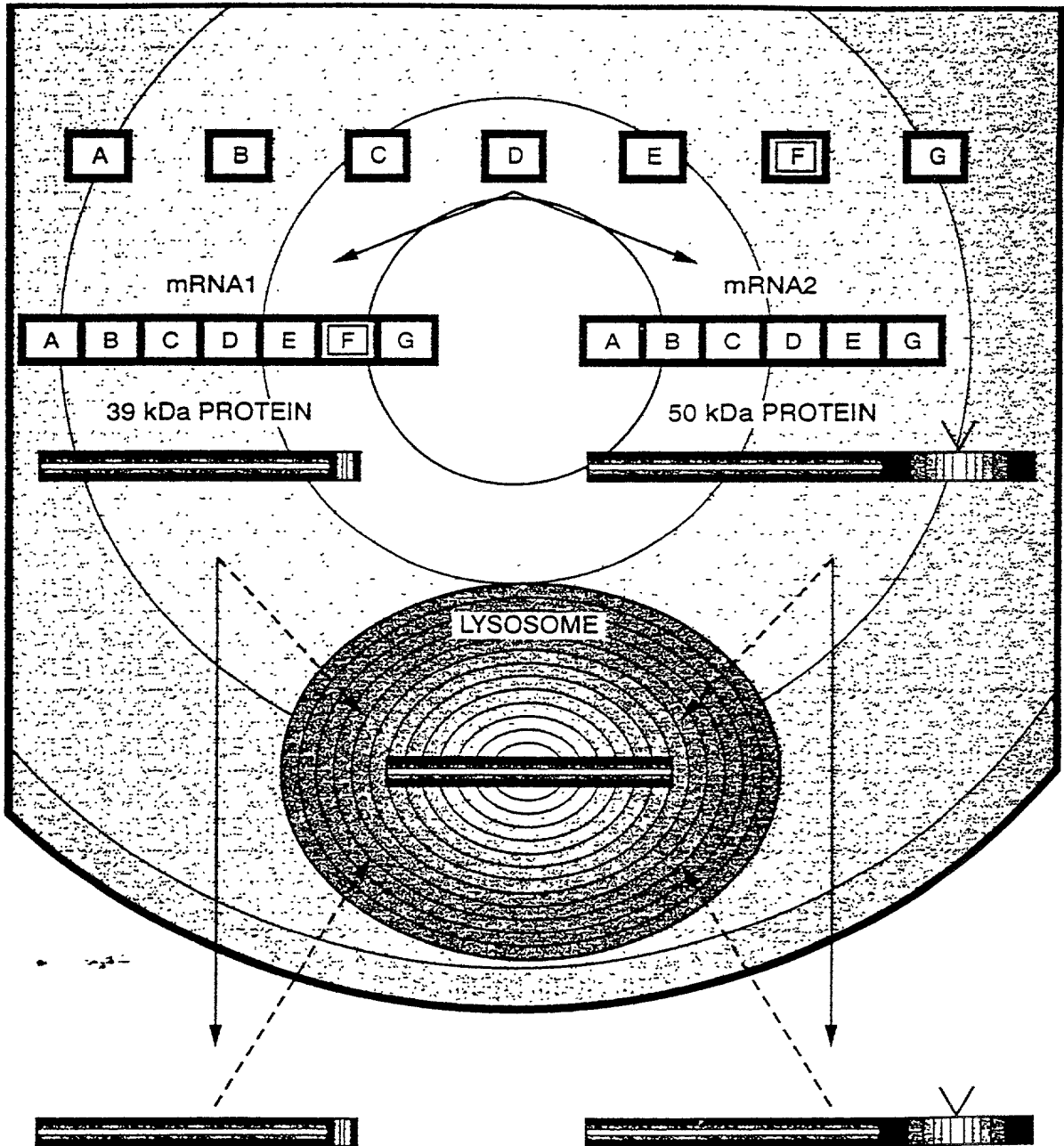
FIG - 2

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1	CTG	AGC	TGC	ATC	ATG	GTG	CGG	TCT	GTG	GCC	TGG	GCA	GGT	TTC	ATG	GTC	CTG	CTG	54
1					M	V	R	S	V	A	W	A	G	F	M	V	L	L	14
55	ATG	ATC	CCA	TGG	GGC	TCT	GCT	GCA	AAA	CTG	GTC	TGC	TAC	TTC	ACC	AAC	TGG	GCC	108
15	M	I	P	W	G	S	A	A	K	L	V	C	Y	F	T	N	W	A	32
109	CAG	TAC	AGA	CAG	GGG	GAG	GCT	CGC	TTC	CTG	CCC	AAG	GAC	TTG	GAC	CCC	AGC	CTT	162
33	Q	Y	R	Q	G	E	A	R	F	L	P	K	D	L	D	P	S	L	50
163	TGC	ACC	CAC	CTC	ATC	TAC	GCC	TTC	GCT	GGC	ATG	ACC	AAC	CAC	CAG	CTG	AGC	ACC	216
51	C	T	H	L	I	Y	A	F	A	G	M	T	N	H	Q	L	S	T	68
217	ACT	GAG	TGG	AAT	GAC	GAG	ACT	CTC	TAC	CAG	GAG	TTC	AAT	GGC	CTG	AAG	AAG	ATG	270
69	T	E	W	N	D	E	T	L	Y	Q	E	F	N	G	L	K	K	M	86
271	AAT	CCC	AAG	CTG	AAG	ACC	CTG	TTA	GCC	ATC	GGA	GGC	TGG	AAT	TTC	GGC	ACT	CAG	324
87	N	P	K	L	K	T	L	L	A	I	G	G	W	N	F	G	T	Q	104
325	AAG	TTC	ACA	GAT	ATG	GTA	GCC	ACG	GCC	AAC	AAC	CGT	CAG	ACC	TTT	GTC	AAC	TCG	378
105	K	F	T	D	M	V	A	T	A	N	N	R	Q	T	F	V	N	S	122
379	GCC	ATC	AGG	TTT	CTG	CGC	AAA	TAC	AGC	TTT	GAC	GGC	CTT	GAC	CTT	GAC	TGG	GAG	432
123	A	I	R	F	L	R	K	Y	S	F	D	G	L	D	L	D	W	E	140
433	TAC	CCA	GGA	AGC	CAG	GGG	AGC	CCT	GCC	GTA	GAC	AAG	GAG	CGC	TTC	ACA	ACC	CTG	486
141	Y	P	G	S	Q	G	S	P	A	V	D	K	E	R	F	T	T	L	158
487	GTA	CAG	GAC	TTG	GCC	AAT	GCC	TTC	CAG	CAG	GAA	GCC	CAG	ACC	TCA	GGG	AAC	GAA	540
159	V	Q	D	L	A	N	A	F	Q	Q	E	A	Q	T	S	G	K	E	176
541	CGC	CTT	CTT	CTG	AGT	GCA	GCG	GTT	CCA	GCT	GGG	CAG	ACC	TAT	GTG	GAT	GCT	GGA	594
177	R	L	L	L	S	A	A	V	P	A	G	Q	T	Y	V	D	A	G	194
595	TAC	GAG	GTG	GAC	AAA	ATC	GCC	CAG	AAC	CTG	GAT	TTT	GTC	AAC	CTT	ATG	GCC	TAC	648
195	Y	E	V	D	K	I	A	Q	N	L	D	F	V	N	L	M	A	Y	212
649	GAC	TTC	CAT	GGC	TCT	TGG	GAG	AAG	GTC	ACG	GGA	CAT	AAC	AGC	CCC	CTC	TAC	AAG	702
213	D	F	H	G	S	W	E	K	V	T	G	H	N	S	P	L	Y	K	230
703	AGG	CAA	GAA	GAG	AGT	GGT	GCA	GCA	GCC	AGC	CTC	AAC	GTG	GAT	GCT	GCT	GTG	CAA	756
231	R	Q	E	E	S	G	A	A	A	S	L	N	V	D	A	A	V	Q	248
757	CAG	TGG	CTG	CAG	AAG	GGG	ACC	CCT	GCC	AGC	AAG	CTG	ATC	CTT	GGC	ATG	CCT	ACC	810
249	Q	W	L	Q	K	G	T	P	A	S	K	L	I	L	G	M	P	T	266
811	TAC	GGA	CGC	TCC	TTC	ACA	CTG	GCC	TCC	TCA	TCA	GAC	ACC	AGA	GTG	GGG	GCC	CCA	864
267	Y	G	R	S	F	T	L	A	S	S	S	D	T	R	V	G	A	P	284
865	GCC	ACA	GGG	TCT	GGC	ACT	CCA	GGC	CCC	TTC	ACC	AAG	GAA	GGA	GGG	ATG	CTG	GCC	918
285	A	T	G	S	G	T	P	G	P	F	T	K	E	G	G	M	L	A	302
919	TAC	TAT	GAA	GTC	TGC	TCC	TGG	AAG	GGG	GCC	ACC	AAA	CAG	AGA	ATC	CAG	GAT	CAG	972
303	Y	Y	E	V	C	S	W	K	G	A	T	K	Q	R	I	Q	D	Q	320
973	AAG	GTG	CCC	TAC	ATC	TTC	CGG	GAC	AAC	CAG	TGG	GTG	GGC	TTT	GAT	GAT	GTG	GAG	1026
321	K	V	P	Y	I	F	R	D	N	Q	W	V	G	F	D	D	V	E	338
1027	AGC	TTC	AAA	ACC	AAG	GTC	AGC	TAT	CTG	AAG	CAG	AAG	GGA	CTG	GGC	GGG	GCC	ATG	1080
339	S	F	K	T	K	V	S	Y	L	K	Q	K	G	L	G	G	A	M	356
1081	GTC	TGG	GCA	CTG	GAC	TTA	GAT	GAC	TTT	GCC	GGC	TTC	TCC	TGC	AAC	CAG	GGC	CGA	1134
357	V	W	A	L	D	L	D	D	F	A	G	F	S	C	N	Q	G	R	374
1135	TAC	CCC	CTC	ATC	CAG	ACG	CTA	CGG	CAG	GAA	CTG	AAT	GGG	TAA	AGC	CTT	AAC	TGC	1188
375	Y	P	L	I	Q	T	L	R	Q	E	L	N	G	***					388
1184	CTG	TCA	CAT	GTG	AGG	CCA	GGT	GTT	GCC	TGT	GGC	ACT	GTG	CTT	CAG	CTG	TAG	GTC	1242
1243	TTC	CAT	ACT	TGC	CTT	CAG	GCA	CCC	CAG	AGC	TTG	AAG	TTC	CAA	AAC	CAG	GTC	AGC	1296
1297	CCT	CTG	AAC	CTG	AGC	ATG	GCC	CCA	GCC	CTG	GAC	AAG	ACA	CGT	TCT	GCC	AGG	GCA	1350
1351	AAG	CTG	ATG	GGC	TCT	ATC	CCA	ATC	CTC	GGG	AAC	GGT	CCA	GCT	TCT	ACA	GCT	GTG	1404
1405	CAG	CGG	GGC	GGC	TGT	TCC	AGC	AAA	GCT	GCC	CGA	CAG	GCC	TGG	TGT	TCA	GCA	ACT	1458
1459	CCT	GCA	AAT	GCT	GCA	CCT	GGA	ATT	GAG	TCG	TAA	AGC	CCC	TCC	AGT	CCA	GCT	TTG	1512
1513	AGG	CTG	GGC	CCA	GGA	TCA	CTC	TAC	AGC	CTG	CCT	CCT	GGG	TTT	TCC	TGG	GGG	CCG	1566
1567	CAA	TCT	GGC	TCC	TGC	AGG	CCT	TTC	TGT	GGT	CTT	CCT	TTA	TCC	AGG	CTT	TCT	GCT	1620
1621	CCT	AGC	CTT	GCC	TTC	CTT	TTT	TCT	TCT	GGG	CTG	CCC	CTT	TCA	CTT	GCA			1674
1675	AAA	TAA	ATC	TTT	GGT	TTG	TGC	CCC	TCA	AAA	AAA	AAA	AAA						1713

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FIG - 3



FOSTOT 4387660 09977827 104501

FIG - 4

Chitotriosidase
 Chitinase Autographa californica
 Chitinase Manduca sexta
 Chitinase Brugia malayi
 Oviductal glycoprotein Human
 Hcgp39 Human
 Yml Mouse
 Chitinase Aphanocladium album
 Chitinase Trichoderma harzianum
 Chitinase Al Bacillus circulans
 Chitinase Nicotiana tabacum class V

F	D	G	L	D	L	D	W	E	Y	P
F	D	G	V	D	I	D	W	E	F	P
F	D	G	L	D	L	D	W	E	Y	P
F	D	G	F	D	L	D	W	E	Y	P
F	D	G	L	D	L	F	F	L	Y	P
F	D	G	L	D	L	A	W	L	Y	P
F	D	G	L	N	L	D	W	Q	Y	P
F	D	G	I	D	I	D	W	E	Y	P
F	D	G	I	D	V	D	W	E	Y	P
F	D	G	V	D	L	D	W	E	Y	P
F	H	G	L	D	L	D	W	E	Y	P

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FIG - 5

